

CARDIOVASCULAR SYSTEM

FINAL EXAM
WAREED BATCH

إعداد :



1. Each of the following is true regarding the tunica intima EXCEPT?

Select one:

- a. It is the innermost layer of the vascular wall of large arteries
- b. It generally contains a single layer of flattened endothelium cells
- c. In elastic arteries it contains subendothelial connective tissue
- d. In large muscular arteries it contains an internal elastic membrane XXX
- e. In large veins, it contains a system of vessels termed the vasa vasorum

2. The following enzyme is promoted by peroxisome proliferator-activated receptor Y (PPAR_Y)?

Select one:

- a. medium acyl-CoA dehydrogenase XXX
- b. Long-chain acyl-CoA dehydrogenase
- c. Pyruvate dehydrogenase kinase
- d. Diacylglycerol acyltransferase
- e. Hexokinase

3. Select the wrong one regarding the four surfaces of the heart?

Select one:

- a. Right pulmonary surface forms the cardiac impression of the left lung XXX
- b. Diaphragmatic (inferior) surface formed mainly by the left ventricle
- c. Anterior (sternocostal) surface formed mainly by the right ventricle
- d. Left pulmonary surface consists mainly of the left ventricle
- e. Right pulmonary surface formed mainly by the right atrium

4. Which one of the following statements is false about drug treatment of heart failure?

Select one:

- a. Milrinone increases (AMP in cardiac muscle by inhibiting phosphodiesterase
- b. Dobutamine has positive inotropic and renal vasodilating effect XXX
- c. Digoxin is contraindicated in heart failure due to severe aortic stenosis
- d. Spironolactone completely antagonizes myocardial fibrosis due to high aldosterone level
- e. ACE inhibitors, nesiritide, and prazosin reduce cardiac preload and afterload

5. The following situations may lead to "culture negative" endocarditis EXCEPT?

Select one:

- a. Non-bacterial etiologies.
- b. The etiological agent is the Gram-negative *Cardiobacterium*.
- c. The use of antibiotics prior to blood culture sampling.
- d. Subacute endocarditis in individuals with prosthetic valves following dental procedures. XXX
- e. Infection by one of unusual organisms causing the endocarditis such as *Coxiella* species.

6. PFK-1 is catalyzing the conversion of fructose 6-phosphate into fructose 1, 6 biphosphate, all of the following can inhibit this enzyme except?

Select one:

- a. decrease ADP/ATP ratio **XXX**
- b. increase NADH+H+/NAD ratio
- c. decrease Activity of PI3 kinase
- d. increase Activity of electron transport chain
- e. decrease Activity of PFK-2

7. Right coronary artery ends by?

Select one:

- a. Anastomosing with the posterior interventricular artery
- b. Anastomosing with the left coronary artery
- c. Anastomosing with the circumflex branch of the left coronary artery **XXX**
- d. Anastomosing with the right marginal artery
- e. Anastomosing with the anterior interventricular artery

8. Which is the wrong regarding the right atrium?

Select one:

- a. Forms the right border of the heart
- b. The SVC opens into it at the level of the right 5th costal cartilage **XXX**
- c. Have the opening of the coronary sinus
- d. Have rough, muscular anterior wall
- e. The oval fossa seen in interatrial septum separating the atria

9. Organs such as the brain and thymus have a more effective blood barrier because their blood capillaries are of the?

Select one:

- a. continuous type with only a few endothelial plasmalemmal vesicles **XXX**
- b. fenestrated type with diaphragms
- c. fenestrated type without diaphragms
- d. discontinuous type with diaphragms
- e. discontinuous type without diaphragms

10. All of the followings are paired branch of the abdominal aorta except?

Select one:

- a. Superior mesenteric artery **XXX**
- b. Renal artery
- c. Lumbar artery
- d. Middle suprarenal artery
- e. Gonadal artery

11. Which of the following inhibits Vaso motor center?

Select one:

- a. Mild hypercapnea
- b. Moderate hypoxia
- c. Left ventricular baroreceptors XXX
- d. Peripheral chemo receptors
- e. Central chemoreceptors.

12. All the followings are Monounsaturated fats EXCEPT?

Select one:

- a. Avocado
- b. Olive Oil
- c. Peanut Oil
- d. Ice cream XXX
- e. Cashews

13. Choose the statement that best describes the ubiquitin proteasome degradation pathway?

Select one:

- a. Ubiquitin molecules have the sterol sensing domain to start HMG CoA reductase degradation
- b. Signaling is not involving the targeted enzyme only
- c. It requires a sterol sensing domain in SREBP and HMG-CoA reductase
- d. Ubiquitin small molecules are ligated to the targeted protein enzymatically XXX
- e. Monomeric ubiquitin is enough for signaling the targeted enzyme

14. Which of the following matched pairs regarding contraction of the cardiac muscle are not true?

Select one:

- a. Calcium-Calmodulin
- b. Calcium bind to ryanodine receptor type2- Calcium outflow from sarcoplasmic reticulum
- c. Calcium bind to C troponin- Move tropomyosin away from the myosin head
- d. Functional syncytium- Very slow synchronized contraction between nodal and myocardial cells XXX
- e. Cross bridge between actin and myosin- Heart pumping

15. All of the followings are anterior relations of the first part of the right subclavian artery except?

Select one:

- a. Sternothyroid muscle
- b. Thoracic duct XXX
- c. Common carotid artery
- d. Platysma muscle
- e. Ansa subclavia

16. Ejection fraction is % ratio of?

Select one:

- a. SV and ESV.
- b. Cardiac output and surface area.
- c. ESV and Cardiac output.
- d. SV and EDV. XXX
- e. Cardiac output and SV.

17. ONE is FALSE about smoking in Jordan?

Select one:

- a. Jordan is among the countries with high smoking prevalence and medium consumption
- b. Male sex is associated with increased prevalence of smoking.
- c. Jordanian smokers smoke an average of 22-42 cigarettes per day per smoker. XXX
- d. Jordan aims to reduce tobacco use by 30% by 2025
- e. 35% of University students in Jordan are smokers

18. Which of the following matched pairs are not true regarding cardiac muscles?

Select one:

- a. Repolarization of the cardiac muscle- Calcium proton ATPase
- b. Repolarization of cardiac muscle- Sodium calcium exchanger
- c. Refractory period- Cannot be tetanized
- d. Phase 3- Only potassium channels are open
- e. Relative refractory period - Phase 1 midway through phase XXX

19. Which of the following is false according to fate of derivatives of the right side of sinus venosus?

Select one:

- a. Right horn forms smooth part of the right atrium
- b. Right vitelline vein gives suprahepatic part of the inferior vena cava
- c. Right umbilical vein degenerated
- d. Right vitelline vein gives subhepatic part of the inferior vena cava XXX
- e. Right common cardinal vein forms lower part of the superior vena cava

20. All of the followings drain in the coronary sinus except?

Select one:

- a. Middle cardiac vein
- b. Posterior vein of the left ventricle
- c. Great cardiac vein
- d. Anterior cardiac vein XXX
- e. Small cardiac vein

21. All of the following about ACE inhibitor are true except:

Select one:

- a. Useful in treatment of hypertension particularly with chronic renal disease.
- b. Useful in treatment of hypertension with left ventricular hypertrophy.
- c. Cause dry cough and loss of taste sensation as adverse effects
- d. They are contraindicated during pregnancy
- e. Cause hypokalemia as adverse effects XXX

22. All the followings are superior relations of the arch of the aorta except?

Select one:

- a. Left common carotid artery
- b. Brachiocephalic artery
- c. Left subclavian artery
- d. Left subclavian vein XXX
- e. Left brachiocephalic vein

23. Cardiac reserve in heart failure equals?

Select one:

- a. 300~400 %
- b. 500-700%
- c. 0% XXX
- d. 100%
- e. 800%

24. The following can inhibit conduction in the accessory AV bundle of Kent except?

Select one:

- a. Procainamide XXX
- b. Disopyramide
- c. Lignocaine
- d. Amiodarone
- e. Quinidine

25. Which of the following does NOT show rapid initial depolarization at the start of an action potential?

Select one:

- a. SA node. XXX
- b. Atrial muscle.
- c. Purkinje fibers.
- d. Ventricular muscle.
- e. Bundle of His.

26. The following precipitate acute heart failure in patient with chronic failure except?

Select one:

- a. Uncontrolled hypertension
- b. Fast atrial fibrillation
- c. Acute bacterial pneumonia
- d. Lack of compliance with salt restriction in diet
- e. Taking candesartan instead of enalapril XXX

27. which one of the following statements concerning high density lipoprotein (HDL) metabolism is CORRECT?

Select one:

- a. HDL is synthesized exclusively from intestine with Apo-C and Apo-E on its surface.
- b. It esterifies free cholesterol to cholesterol ester via cholesterol ester transfer protein (CETP).
- c. Cholesterol ester of HDL is selectively taken up by liver cells via scavenger receptors-B1. XXX
- d. High discoid HDL/HDL2ratio indicates effectiveness of reverse cholesterol transport.
- e. Its main apolipoprotein is Apo-B100.

28. A smoker gains almost 10 years of life expectancy when smoking cessation at which age?

Select one:

- a. 30 XXXX
- b. 40
- c. 50
- d. 60
- e. 70

29. Which of the following is not true?

Select one:

- a. As you start to move from arterioles to capillaries the cross-sectional area and velocity are going to start rising XXX
- b. Increase the preload would increase the stroke volume and thus the perfusion blood pressure
- c. Turbulent blood flow observed in both pathological and physiological conditions
- d. Hypertension would increase afterload and thus decrease stroke volume
- e- Polycythemia would decrease perfusion blood pressure

30. Regarding the arterial supply to the upper limb, ALL the following statements are WRONG, EXCPT: Choose one ANSWER?

Select one:

- a. is delivered via three main arteries
- b. Right subclavian comes off the aorta
- c. Radial artery is smaller than ulnar artery
- d. Brachial artery has no branches in the upper half of the arm
- e. Ulnar artery is the main blood supply of the forearm and hand. XXX

31. The vulnerable period of the heart is?

Select one:

- a. Absolute refractory period.
- b. Relative refractory period. XXX
- c. Negative after potential.
- d. Positive refractory period.
- e. Plateau.

32. All the following are true regarding Malignant hypertension, except?

Select one:

- a. It measures as systolic pressures over 200 mm Hg or diastolic pressures over 120 mmHg.
- b. Accounting (approximately 5%) of hypertensive patients.
- c. Associated with renal failure and retinal hemorrhages.
- d. Microscopically, marked by hyaline arteriolosclerosis. XXX
- e. It is most commonly superimposed on preexisting benign hypertension.

33. Which one of the followings considered as a Novel risk factors for CVD?

Select one:

- a. Physical inactivity
- b. inflammatory markers (C-reactive protein) XXX
- c. Cigarette smoking
- d. Obesity
- e. Hypertension

34. Which of the following is CORRECT as regards micro-RNA (miRNA)?

Select one:

- a. It is a single~stranded coding RNA.
- b. miRNA-499 decreases in all patients with acute myocardial infarction.
- c. miRNA-122 expression is up-regulated in acute myocardial infarction.
- d. Blood levels of miRNA never changes upon acute MI.
- e. It acts by targeting specific mRNA for degradation or translational repression. XXX

35. All the following are adverse effects of thiazide diuretics except:

Select one:

- a. Hyperglycemia
- b. Hypokalemia
- c. Thrombocytopenia
- d. Increase plasma cholesterol
- e. Hyponatremia XXX

36. An ECG revealed no P waves in any lead indicates damage of?

Select one:

- a. Sino atrial (SA) node XXX
- b. Bundle of His.
- c. Purkinje fibers.
- d. Left bundle branch.
- e. Right bundle branch.

37. In cholesterol synthetic pathway, which of the following coenzymes is serving as a hydrogen donor in the reactions catalyzed by HMG-CoA reductase and squalene epoxidase?

Select one:

- a. NAD
- b. Pantothenic acid
- c. NADP XXX
- d. Lipoic acid
- e. FAD

38. 41-year-old woman has had increasing dyspnea for the past week. On physical examination, temperature is 37.3°C, and blood pressure is 150/95 mm Hg. There is dullness to percussion over the lung bases. A chest radiograph shows large bilateral pleural effusions and a normal heart size. Laboratory findings includes serum creatinine 3.1 mg/dL and positive ANA and anti-double-stranded DNA antibody test results. Which of the following cardiac lesions is most likely to be present in this patient?

Select one:

- a. Calcific aortic stenosis.
- b. Hemorrhagic pericarditis.
- c. Nonbacterial thrombotic endocarditis.
- d. Libman-Sacks endocarditis. XXX
- e. infective endocarditis.

39. A 55-year-old woman experienced sudden severe substernal chest pain. She Fainted and woke up in the emergency room.

Examination revealed tachycardia and hypotension. Laboratory studies show an increased serum troponin I, and an ECG confirmed the presence of ST-segment elevated MI. Which of the following features would be most prominent by histopathologic examination of the involved myocardium in 8 weeks?

Select one:

- a. Collagenous scar. XXX
- b. Neutrophilic infiltration.
- c. Well established granulation tissue.
- d. Wavy fibers.
- e. Macrophages infiltration.

40. Fatty streaks on arterial walls are recognized as early lesions for atheroma, lesions show increased attachment of monocytes to endothelium, the monocytes migrate and become macrophages: these macrophages transform themselves into FOAM CELLS.

Which of the following substances is most likely to be responsible for the transformation of macrophages?

Select one:

- a. C-reactive protein.
- b. Homocysteine.
- c Lipoprotein.
- d. Oxidized LDL.
- e. Platelet-derived growth factor. XXX

41. Which of the following biochemical markers will be the most specific to acute myocardial infarction?

Select one:

- a. Total creatine kinase.
- b. Cardiac troponin I. XXXX
- c. Creatine kinase/MM.
- d. Lactate dehydrogenase-.
- e. Myoglobin.

42. One of the followings does not pass in the posterior mediastinum?

Select one:

- a. Esophagus
- b. Trachea XXXX
- c. Azygous venous system
- d. Descending thoracic aorta
- c. Thoracic duct

43. With respect to cardiac cycle?

Select one:

- a. It reflects the electrical activity of the heart.
- b. Its duration equals 8 seconds.
- c. It consists of 8 phases. XXXX
- d. It consists of 8 phases and its duration equals 8 seconds.
- e. It starts by ventricular systole.

44. Concerning regulation of coronary blood flow?

Select one:

- a. Autonomic supply to coronaries plays a massive role in the regulation of coronary blood flow.
- b. The net effect of sympathetic stimulation is coronary V.D
- c. ADH in small concentration produces coronary VC.
- d. The net effect of Noradrenalin is a strong V.C XXX
- e. Increase the metabolic activity of heart decreases the coronary blood flow.

45. With respect to first heart sound, all are true, except?

Select one:

- a. It is of low pitch.
- b. Occurs in isometric relaxation phase. XXX
- c. Occurs in isometric contraction and first part of maximum ejection phase.
- d. Longer in duration than second one.
- e. It is of mitral and aortic components.

46. A 65-year-old male has had stable angina for the last-4 years. For the last week he has experienced multiple angina attacks while on rest, with the pain severity has increased. Electrocardiogram revealed ST segment elevation. labs revealed elevated serum Troponin.

Which of the following events is most likely to explain these findings?

Select one:

- a. Atherosclerotic plaque disruption and superimposed thrombosis. XXX
- b. Fibrinous pericarditis.
- c. Left ventricular mural thrombosis
- d. Ventricular aneurysm.
- e. Mitral valve prolapse.

47. All the followings are Non-modifiable CVD risk factors EXCEPT?

Select one:

- a. Diabetes mellitus XXX
- b. Heredity or family history
- c. Age
- d. Ethnicity or race
- e. Gender

48. Which of the following is false about digoxin ?

Select one:

- a. It leads to acceleration of phase 3 of cardiac action potential in atrium and ventricle
- b. It has selective cardiac vagal stimulant action on atrial muscle and AV node
- c. In overdose, it can lead to formation of DADS in both atria and ventricles
- d. It can easily control the ventricular rate in atrial fibrillation in hyperthyroidism
XXX
- e. It has a very low therapeutic index

49. Bilateral leg edema seen in the following except?

Select one:

- a. heart failure
- b. nephrotic syndrome (renal disease)
- c. liver disease
- d. immobility
- e. asthma XXX

50. Immediately after Hemorrhage?

Select one:

- a. There is increase in the muscle tone of abdominal wall muscles.
- b. There is increase in the central venous pressure.
- c. There is conversion of tissue proteins into plasma proteins.
- d. There is Increase in sympathetic discharge to the heart due to increase the firing of baroreceptors. XXX
- e. Anemic hypoxia stimulates release of erythropoietin from the kidney to stimulate erythropoiesis.

51. A 17-month old boy presents with a three days history of fever and a skin rash. No accompanying cough or diarrhea. On physical examination, and in addition to the rash, he was found to have cervical lymphadenopathy and oral rash.

What is the most common fatal complication of the most likely diagnosis?

select one:

- a. Asthma.
- b. Glomerulonephritis.
- c. Intracranial hemorrhage.
- d. Septic shock.
- e. Coronary artery aneurysm. XXX

52. Which one of the following is not an adverse effect of quinidine?

Select one:

- a. Diarrhea
- b. Atrial fibrillation XXX
- c. Tinnitus and dizziness
- d. Torsade de pointes
- e- A-V block

53. Cardiac output is decreased physiologically in?

Select one:

- a. Marked increase in HR
- b. Marked decrease in HR
- c. Low temperature
- d. Sudden standing from lying down XXX
- e. Severe hemorrhage.

54. Sympathetic V.C tone is diminished in response to increase activity of?

Select one:

- a. Carotid body
- b. Cutaneous pain receptor
- c. Carotid sinus XXX
- d. Mild hypoxia
- e. Hypercapnia.

55. Total peripheral resistance is conserved mainly by?

Select one:

- a. Venules.
- b. Small arteries.
- c. Capillaries.
- d. Arterioles. XXX
- e. Veins.

56. One of the following is incorrect about abdominal aortic aneurysm (AAA)?

Select one:

- a. It is most common location of an aneurysm caused by atherosclerosis.
- b. Risk for rupture is related to the size, 6 cm in diameter or less almost never burst XXX
- c. Typically located between the renal arteries and the aortic bifurcation.
- d. Mortality rate in emergency surgery after rupture reaches 50%.
- e. Most AAAs are asymptomatic.

57. The pathogenesis of atherosclerosis is based on response-to-injury hypothesis.

Which of the following steps is considered to be the cornerstone of this process?

Select one :

- a. Smooth muscle cell proliferation and extracellular matrix deposition.
- b. Increased local oxygen free radical production.
- c. Thrombosis superimposed on an ulcerated plaque.
- d. Endothelial injury and dysfunction. XXX
- e. Accumulation of lipoproteins (mainly oxidized LDL) in the vessel wall.

58. The profunda femoris artery arises from?

Select one:

- 1. Lateral aspect of the femoral artery
- b- Anterior aspect of the femoral artery
- c. Medial aspect of the femoral artery
- d. Posterolateral aspect of the femoral artery XXX
- e. Posterior aspect of the femoral artery

59. All of the followings are branches from internal carotid artery except?

Select one:

- a. Posterior cerebral artery XXX
- b. Ophthalmic artery
- c. Middle cerebral artery
- d. Anterior choroidal artery
- e. Anterior cerebral artery

60. QRS complex indicates?

Select one:

- a. Atrial depolarization
- b. Ventricular depolarization XXX
- c. Atrial repolarization
- d. Ventricular repolarization
- e. Papillary muscle repolarization.

61. 10~year-old girl develops subcutaneous nodules over the skin of her arms and torso 3 weeks after a bout of acute pharyngitis. She manifests choreiform movements and begins to complain of pain in her knees and hips, particularly with movement. A friction rub is heard on auscultation of her chest. An abnormality detected by which of the following serum laboratory findings is most characteristic of the disease affecting this girl?

Select one:

- a. Antistreptolysin O antibody titer. XXX
- b. Antinuclear antibody titer.
- c. Creatinine level.
- d. Rapid plasma test.
- e. Troponin i level.

62. The foramen ovale lies between?

Select one:

- a. Septum secundum below and septum primum above
- b. Septum primum and endocardial cushions
- c. Septum primum and roof of the atrial chamber
- 'd. Septum secundum above and septum primum below XXX
- e. Septum secundum and endocardial cushions

63. ONE of the following is FAISE?

Select one:

- a. Daily intake of fresh fruit and vegetables in an adequate quantity (400-500 g per day)
- b. Potassium intake should be at a level which will keep the sodium to potassium ratio close to 10 XXX
- c. Regular fish consumption (1 -2 servings per week) is protective
- d. refined carbohydrates are harmful
- e. Filtered coffee significantly lead to a decline in serum cholesterol

64. Concerning organic nitrates, all the following are true EXCEPT?

Select one:

- a. They contract all types of smooth muscles. XXX
- b. They relief cardiac pain by reducing cardiac work.
- c. GTN is usually given sublingually.
- d. They are highly lipid soluble.
- e. Plasma half life of isosorbide dinitrate is 20 minutes.

65. The early filling of ventricles occurs in?

Select one:

- a. Reduced filling phase.
- b. Maximum filling phase.
- c. Atria Systole.
- d. in both Reduced filling phase and Maximum filling phase. XXX
- e. In both Maximum filling phase and Atrial systole.

66. By an autopsy examination of a case of sudden death, the heart showed thinning of the ventricular wall, and the microscopic examination revealed myocyte replacement by massive fatty infiltration with mild fibrosis, the proper diagnosis is?

Select one:

- a. Restrictive Cardiomyopathy.
- b. Myocarditis.
- c. Hypertrophic cardiomyopathy (HCM).
- d. Arrhythmogenic Right Ventricular Cardiomyopathy. XXX
- e. Dilated Cardiomyopathy.

67. T wave of normal electro-cardiogram corresponds to ?

Select one:

- a. Ventricular depolarization.
- b. Ventricular repolarization. XXX
- c. Atrial depolarization.
- d. Atrial systole.
- e. Papillary muscle repolarization.

68. Which of the following mechanisms mainly explains atherosclerosis in familial hyperlipoproteinemia (broad beta; type III)?

Select one:

- a. Improper removal of VLDL remnants and chylomicron remnants from circulation. XXX
- b. Deletion of ABC-A1 transporters that leads to cholesterol accumulation within blood cells.
- c. High blood level of free cholesterol due to defective Apo-A1.
- d. Increased triglycerides in blood due to defect in its hydrolysis by lipoprotein lipase.
- e. High level of Triacylglycerol due to mutation of microsomal transfer protein (MTP).

69. All of the following drugs are Ca- antagonist except:

Select one:

- a. Nifedipine
- b. Verapamil
- c. Diltiazem
- d. Amlodipine
- e. Acebutalol XXX

70. All the following effusion types are correctly combined with their causes, except?

Select one:

- a. Fibrinous effusion: Malignancy. XXX
- b. Serous effusion: Hypoalbuminemia.
- c. Serosanguineous effusion: Aortic dissection.
- d. Chylous effusion: Mediastinal lymphatic obstruction.
- e. Serosanguineous effusion: Blunt chest trauma.

71. One of the following is INCORRECT LY matched?

Select one:

- a. Superior vena cava ===== thick tunica media with lots of smooth muscle XXX
- b. Carotid artery ===== the thickest tunica intima
- c. Superior vena cava =====: the thickest adventitia
- d. Pulmonary artery ===== concentric lamellae of elastic fibers
- e. Inferior vena cava ===== bundles of longitudinal smooth muscle

72. Regarding the diastolic Period of the heart?

Select one:

- a. It is the period of ventricular filling with blood. XXX
- b. Complete Coronary filling occurs during it.
- c. It is a period for ventricular rest.
- d. Maximum ventricular pressure occurs during it.
- e. It is the period of ventricular rest and filling with blood.

73. All following about antihyperlipidemic drugs EXCEPT?

Select one:

- a. Ezetimibe has short half life XXX
- b. Statin is contraindicated in children
- c. Statin is contraindicated in pregnancy
- d. Fibrates can cause Gallbladder stones
- e. Fibrates can cause myositis

74. 25-year-old man was found dead at home by the apartment manager, who had been called by the decedent's employer because of failure to report to work for the past 3 days. An external examination by the medical examiner showed splinter hemorrhages under the fingernails and no signs of trauma. The gross appearance of the heart at autopsy is shown in the figure.

Which of the following laboratory findings is most likely to provide evidence for the cause of his disease?

Select one :

- a. Elevated cardiac enzymes.
- b. Positive ANCA serology.
- c. Increased creatine kinase-MB (CK-MB) fraction.
- d. High double stranded DNA autoantibody titer.
- e. Positive blood culture for Staphylococcus aureus. XXX

75. The distal part of the left 6th pharyngeal arch forms?

Select one:

- a. Left common carotid artery
- b. Maxillary artery
- c. Arch of the aorta
- d. Ductus arteriosus XXXX
- e. Pulmonary artery

76. Which of the following is incorrect concerning cardiac muscle?

Select one:

- a. Cardiac cells are smaller than skeletal muscle cells.
- b. Electrical communication between cardiac cells is maintained via gap junctions, which are specialized portions of the intercalated discs. ‘
- c. Mechanical attachment of cardiac cells is at the intercalated disc.
- d. The spread of excitation through the heart muscle is 3-dimensional.
- e. Transverse tubules are larger in skeletal muscle than in heart muscle allowing more diffusion of Ca^{2+} into the interior of the cell. XXX

77. Which of the following will be greater during plateau phase than at rest?

Select one:

- a. Sodium conductance.
- b. Potassium conductance
- c. Calcium conductance XXX
- d. Chloride conductance
- e. Magnesium conductance.

78. Which of the following matches is wrong regarding antihyperlipidemic drugs?

Select one:

- a. Statins-hypercholesterolemia
- b. Nicotinic acid - familial hyperlipidemias XXX
- c. Fibrates- hypercholesterolemia
- d. Ezetimibe- Cholesterol Absorption Inhibitor
- e. Cholestyramine- hypercholesterolemia

79. Which is wrong regarding the orientation of heart?

Select one:

- a. The heart and roots of the great vessels within the pericardial sac
- b. The heart and pericardial sac are situated obliquely
- c. The right atrium lies anterior to the left atrium
- d. Related anteriorly to the sternum and costal cartilages
- e. Lying about two thirds of the heart to the right of the median plane XXX

80. Auscultation of the heart valves. Which is wrong?

Select one:

- a. The aortic valve over the medial end of the second right intercostal space
- b. The pulmonary valve over the medial end of the second left intercostal space
- c. The first sound is produced by the sharp closure of the aortic and pulmonary valves XXX
- d. The mitral valve at the level of the fifth left intercostal space, (9 cm) from the midline
- e. The tricuspid valve over the left half of the lower end of the body of the sternum

إنتهى

بالتوفيق للجميع

